Environmental Restoration (ER) Project Cerro Grande Fire Accelerated Action Information Sheet

Potential Release Site (PRS) 02-005 Cooling Tower Drift

Technical Area (TA)-2, located in Los Alamos Canyon, housed several reactors, including the Omega West and Water Boiler Reactors. The reactors were shutdown, removed from the nuclear facilities list, and placed into the Laboratory's Decontamination and Decommissioning program.

PRS History: PRS 02-005 is the area affected by drift loss (mist) of potassium dichromate from the Omega West Reactor cooling tower (Structure 2-49) from 1957 to the mid 1970s. Potassium dichromate was added to the cooling water to prevent corrosion of aluminum heat exchangers. Deposition from drift loss occurred mainly to areas north and east of the Omega West Reactor because of the prevailing northeasterly winds in Los Alamos Canyon. An employee recalled that the drift loss turned the hillside green. Calculations based on historical data indicate that over a 17year period, approximately 5,000 pounds of hexavalent chromium might have been released to the soil and sediments adjacent to the cooling tower. Field screening was conducted in 1995. Results showed no detectable concentrations of organics and no alpha activity above instrument background. Dose rates were also below instrument background. Beta/gamma activity was slightly above instrument background.

PRS 02-005 is not listed on the Hazardous and Solid Waste Amendments module to the Laboratory's Hazardous



Waste Facility permit. The ER Project has not proposed the site for no further action.

Issues of Concern: The area upstream of PRS 02-005 burned during the Cerro Grande fire. The intensity of upstream burn was low to moderate. Surface soils at the site are contaminated with chromium and may be subject to erosion or scouring. The site does not contain debris that could enter the flood watercourse.

Accelerated Action Status: PRS 02-was evaluated after the Cerro Grande fire. ER Project personnel determined that no accelerated corrective action was required at this time.

Related Documents:

"Solid Waste Management Units Reports," Vol. I of IV (TA-0 through TA-9) LANL Report LA-UR-90-3400, revised November 1990.

"RFI Work Plan for Operable Unit 1098 (TA-2, 41)," LANL Report LA-UR-92-3825, June 1993.